Amendments to the Claims:

Claims 1-27 were pending in this application. Please cancel claims 1-27 and add the following new claims 28-40:

1.-27. (canceled).

1   28. (new) A method of monitoring data stored on a primary storage
2   system comprising:
3   creating a sequence of mirrors-in-the-middle, each mirror-in-the-
4   middle including a copy of data stored on the primary storage system at a fixed point
5   in time;
6   checking a first mirror-in-the-middle of the sequence of mirrors-in-the-
7   middle to see if a copy of data stored on the first mirror-in-the-middle satisfies at
8   least one constraint; and
9   if not, repeating checking previous mirrors-in-the-middle in the
10   sequence of mirrors-in-the-middle until one of the checked previous mirrors-in-the-
11   middle includes an uncorrupted copy of data satisfying the at least one constraint.

1   29. (new) The method of claim 28 further comprising restoring the
2   uncorrupted copy of data to the primary storage system.

1   30. (new) The method of claim 28 wherein checking comprises
2   scanning for viruses.

1   31. (new) The method of claim 28 wherein checking comprises
2   monitoring a database for consistency of constraints.

1   32. (new) The method of claim 28 further comprising storing the
2   sequence of mirrors-in-the-middle using a data management appliance.

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1   33. (new) The method of claim 28 further comprising restoring the

2   copy of data stored on the first mirror-in-the-middle to the primary storage system

3   if the copy of data stored on the first mirror-in-the-middle satisfies the at least one

4   constraint.

1   34. (new) The method of claim 28 further comprising:

2   if the copy of data stored on the first mirror-in-the-middle satisfies the

3   at least one constraint, checking a copy of data stored on at least one additional

4   mirror-in-the-middle later in the sequence of mirrors-in-the-middle than the first

5   mirror-in-the-middle to see if the copy of data stored on the at least one additional

6   mirror-in-the-middle satisfies the at least one constraint.

1   35. (new) A data management appliance comprising:

2   a random-access storage unit storing a sequence of mirrors-in-the-

3   middle, each mirror-in-the-middle including a copy of data stored on a primary

4   storage system at a fixed point in time; and

5   control logic in communication with the random-access storage unit,

6   the control logic operative to checking a first mirror-in-the-middle of the sequence

7   of mirrors-in-the-middle to see if a copy of data stored on the first mirror-in-the-

8   middle satisfies at least one constraint and, if not, repeating checking previous

9   mirrors-in-the-middle in the sequence of mirrors-in-the-middle until one of the

10   checked previous mirrors-in-the-middle includes an uncorrupted copy of data

11   satisfying the at least one constraint.

1   36. (new) The data management appliance of claim 35 wherein the

2   control logic is further operative to restore the uncorrupted copy of data to the

3   primary storage system.

1   37. (new) The data management appliance of claim 35 wherein

2   checking comprises scanning for viruses.

1   38. (new) The data management appliance of claim 35 wherein

2 checking comprises monitoring a database for consistency of constraints.

1   39. (new) The data management appliance of claim 35 wherein the

2 control logic is further operative to restore the copy of data stored on the first mirror-

3 in-the-middle to the primary storage system if the copy of data stored on the first

4 mirror-in-the-middle satisfies the at least one constraint.

1   40. (new) The data management appliance of claim 35 wherein the

2 control logic is further operative to check a copy of data stored on at least one

3 additional mirror-in-the-middle later in the sequence of mirrors-in-the-middle than

4 the first mirror-in-the-middle to see if the copy of data stored on the at least one

5 additional mirror-in-the-middle satisfies the at least one constraint if the copy of data

6 stored on the first mirror-in-the-middle satisfies the at least one constraint.